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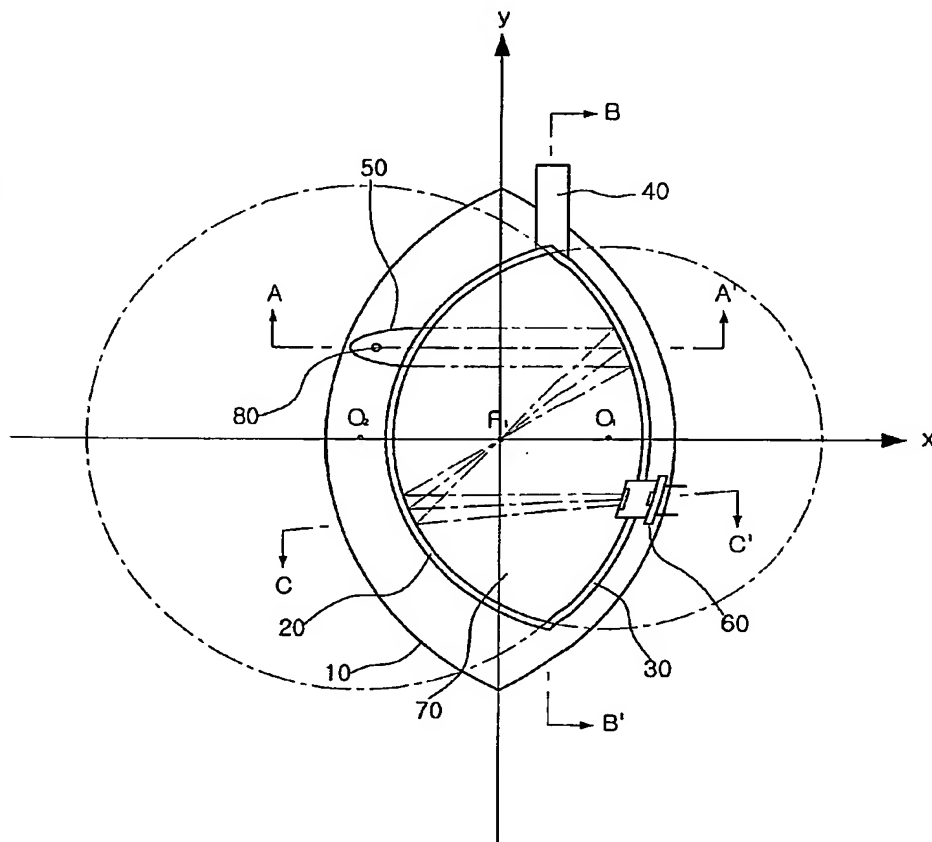
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| <p><b>(51) International Patent Classification<sup>7</sup>:</b> G01N 21/35</p> <p><b>(21) International Application Number:</b><br/>PCT/KR2004/003243</p> <p><b>(22) International Filing Date:</b><br/>10 December 2004 (10.12.2004)</p> <p><b>(25) Filing Language:</b> Korean</p> <p><b>(26) Publication Language:</b> English</p> <p><b>(30) Priority Data:</b><br/>10-2003-0090539<br/>12 December 2003 (12.12.2003) KR<br/>10-2004-0091776<br/>11 November 2004 (11.11.2004) KR</p> <p><b>(71) Applicant (for all designated States except US):</b> ELT INC. [KR/KR]; B-303, Soonchunhyang Medical Technology Business Incubator, 646, Eumnae-ri, Sinchang-myeon, Asan-si, Chungcheongnam-do 336-885 (KR).</p> | <p><b>(72) Inventors; and</b><br/><b>(75) Inventors/Applicants (for US only):</b> YI, Seung-Hwan [KR/KR]; 232-303, Olymic Family Apt., 150, Moonjeong-dong, Songpa-gu, Seoul 138-202 (KR). PARK, Jeong-Ik [KR/KR]; 904, Dong-A 1st Apt., 419-13, Seongnae 3-dong, Gangdong-gu, Seoul 134-845 (KR). KANG, Ji-Hyun [KR/KR]; 1012-2301, Hyundai 10th Parkvill Apt., 577, Kwangjang-dong, Kwangjin-gu, Seoul 143-769 (KR).</p> <p><b>(74) Agent:</b> NAM, Sang-Sun; 9th Fl., Maekyung Media Center, 30, 1-ga, Pil-dong, Jung-ku, Seoul 100-728 (KR).</p> <p><b>(81) Designated States (unless otherwise indicated, for every kind of national protection available):</b> AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH</p> |
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- (54) Title: GAS SENSOR**



- (57) Abstract:** A unique optical cavity for NDIR gas sensor module and test results for the CO<sub>2</sub> concentration from 100 ppm to 2,000 ppm are disclosed. The proposed sensor module shows the maximum peak voltage at 500 ms pulse duration, however, it has a maximum fractional voltage changes at 200 ms pulse duration with 18,000 times amplification gain. From 100 ppm to 2,000 ppm, the voltage difference of sensor module (V) is 200 mV at 200 ms pulse duration and 3 sec. turn-off time.



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